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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,575	10/17/2003	Matthew Brown	49480-051	8953

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600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

MANLOVE, SHALIE A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,575

Applicant(s)

BROWN, MATTHEW

Examiner

Shalie A. Manlove

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 9, 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/17/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Election/Restrictions

1. Applicant's election without traverse of Group V claims 44-50, in paper dated April 9, 2004 is acknowledged.

Information Disclosure Statement

2. The information disclosure statement filed October 17, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

3. Claim 44 is objected to because of the following informalities: The ratio of weight of the pigment to weight of the vehicle-binder is incorrectly written as **1:15:1**, the ratio should be rewritten **1.15:1**. Appropriate correction is required.

Claims 47 and 50 are objected to because of the following informalities: The term propyronic acid is a nonexistent compound; Kadox 930c contains propionic acid. Applicant needs to change **propyronic** to **propionic**. Appropriate correction is required.

Specification

4. The disclosure is objected to because of the following informalities:
5. Propyronic acid is recited throughout the specification, however the substance is a nonexistent compound. Kadox 930c contains propionic acid. Applicant needs to change **propyronic** to **propionic**. Appropriate correction is required.

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6. Is the silicate an aqueous dispersion as exemplified or not? Is the weight ratio based on weight of silicate or dispersion? If it is the dispersion, what is the percent of silicate is in the dispersion?

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 48 and 50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification only teaches one half percent by weight of the acid, there are no other amounts reported for this substance.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

10. Claims 44-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claims 44 and 48 recite an alkali metal silicate vehicle-binder. Is the silicate an aqueous dispersion as exemplified or not. Is the weight ratio based on weight of silicate or dispersion? If it is the dispersion, what is the percent of silicate is in the dispersion?

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12. The term "relatively small" in claim 48 is a relative term, which renders the claim indefinite. The term "relatively small" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. How small is relatively small?

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 44-46 and 48-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Babel et al US 5,296,285.

Babel discloses in claims 1-7, a coating for a substrate of aluminum or aluminum alloy. The coating comprising potassium silicate binder and zinc oxide particles, wherein the amount of particles in the binder range from 50-90% by weight and inherently the binder is present in range from 10-50% by weight. Babel also inherently teaches in claim 7, that sufficient water was added to produce a coating with properties of solar absorptance and infrared emittance. The reference

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reports weight percent instead of weight ratios, however converting the claimed ratio to percent yields a zinc oxide range of 54-59% by weight and vehicle-binder range of 41-46% by weight and thus presents overlapping ranges. A prima facie case of obviousness typically exists when the range of acclaimed composition overlap the ranges disclosed in the prior art. In re Malagari, 499 F2d 1297, 1303, 182 USPQ 549,533 (CCPA 1974).

15. Claims 44-46 and 48-49 rejected under 35 U.S.C. 103(a) as being unpatentable over Terry et al US 3,769,050.

Terry discloses a silicate paint comprising 40 percent by volume zinc oxide and inherently up to 60 percent by volume potassium silicate (col. 1, lines 18-24; col. 2, lines 27-34; col. 3, lines 55-58) and additional water to produce paint as coating an aluminum or primer coated aluminum surfaces. When volume percent is converted to weight percent the ranges of pigment and binder dispersion overlaps. Thus, the reference is considered to read upon the respected claimed amount absence the showing of convincing evidence to the contrary. A prima facie case of obviousness typically exists when the range of acclaimed composition overlap the ranges disclosed in the prior art. In re Malagari, 499 F2d 1297, 1303, 182 USPQ 549,533 (CCPA 1974).

Allowable Subject Matter

16. Claim 47 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph and objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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17. The following is a statement of reasons for the indication of allowable subject matter:
The prior art of record fails to teach or suggest the claimed paint or coating comprising one half percent of propionic acid.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shalie A. Manlove whose telephone number is (571) 272-1372. The examiner can normally be reached on M-TH 6:30-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shalie A. Manlove
Examiner
Art Unit 1755

May 20, 2004


C. MELISSA KOSLOW
PRIMARY EXAMINER